This is Your Brain on Trauma

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Victim/Witness services (VWS) for Coconino County is a community-oriented, non-profit organization that provides 24/7: on-scene crisis response, death notification support, case management, criminal justice advocacy, prevention education, and administers the Coconino County victim’s compensation program. Victim/Witness staff are leaders in community coordination, systems improvement, and county collaboration. As a part of system improvement, we have been conducting trainings on the Neurobiology of Sexual Assault (Trauma), encouraging law enforcement to take online trainings on the End Violence against Women International training site, to adopt the “Start by Believing” campaign and incorporating FETI (Forensic Experiential Trauma Interview) as a tool in their toolbox. As victim’s advocates, we get a front seat to the criminal justice process. In the United States, less than half of all felony arrests result in convictions. This failure of arrests to come to trial is called case attrition, and most attrition occurs between arrest and filing. According to RAINN (Rape Abuse & Incest National Network), out of every 100 rapes, only three rapists will spend time in prison\(^1\). Although there may be limitations in the data\(^2\); case attrition in sexual violence cases is alarming. It is important for first responders to understand why and how case attrition can happen.

Dr. Campbell’s Research on the Neurobiology of Sexual Assault:

Who is Dr. Campbell:

Dr. Rebecca Campbell, a Professor of Psychology and Program Evaluation at Michigan State University, she has conducted research on victimology and evaluation with an emphasis on violence against women and children for the past 20 years. Her work examines how rape crisis centers in the legal and medical and mental health systems respond to the needs of adult, adolescent, and pediatric victims of sexual assault. The following link is to a well-developed 90 minute webinar that captures the entire concept: [http://nij.gov/multimedia/presenter/presenter-campbell/Pages/welcome.aspx](http://nij.gov/multimedia/presenter/presenter-campbell/Pages/welcome.aspx)

To address limitations in the literature, Dr. Campbell conducted a small study on case attrition and sexual assault with six different communities. On average, **86 percent of the reported sexual assaults never went any further than the police**. The vast majority of these cases were never referred by the police to the prosecutors. From this study, it was verified that case attrition for sexual assault is alarmingly high\(^3\).

While it is noted, many communities have started to move forward in their practices, paradigms, and strategies. The “Start by Believing” campaign has gained enormous strides in Arizona. Arizona was the first state (Utah is on its way) to have a signed statewide proclamation stating that first responders will start each sexual assault case “by believing” the victim. In 2012, Flagstaff had its own version of the

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\(^3\) Campbell, R. (2006). Rape survivors' experiences with the legal and medical systems do rape victim advocates make a difference?. *Violence against women*, 12(1), 30-45.
“Start by Believing” campaign; we had a lot of buy-in from many partners. Not all communities are the same; however, it is still important to understand the big picture.

**Why Study Neurobiology of Sexual Assault:**

**Secondary Victimization and Case Attrition**

When a victim does not feel supported or believed, they may experience secondary victimization. The psychological impact on the victim of secondary victimization is that they feel blamed, become depressed, develop anxiety, they feel violated again, and become less likely to seek further help. In her study, Dr. Campbell found that 90% of her sample population experienced some form of secondary victimization.

**Bringing Psychology/Psychiatry and Case Attrition data together:**

If experienced law enforcement officers are commonly and across the board confused about the behavior of sexual assault victims, there must be something going on. There must be a logical reason beyond “cops don’t understand or don’t care”. Because it has been my experience that members of law enforcement do care and do want to do what’s best for victims. In order to better understand the behavior of survivors (and case attrition), looking at the neurobiology of trauma may offer some trainable explanations.

**Let’s look at the brain, but for a more technical and scientific explanation see the webinar:**

**Hormones**

When there is a traumatic incident there are several different types of hormones that literally flood the system. These hormones cause the fight/flight or “freeze” response, they increase energy, prevent pain, and promote “good” feelings. These hormones are essential for the survival of the victim after such a traumatic event. However, after the event, the body loses energy and the victim experiences a “flat effect”. Further, the “freeze” response, sometimes called tonic immobility, causes the victim to literally freeze during the incident (or “just lay there and take it”). Most people in common conversations will talk about fight/flight but “freeze” is not a commonly understood response.

**The way in which memories are made:**

The brain organizes all information- what you see, what you hear, what you smell, and you what you physically feel like. The brain takes all of that information and consolidates it, organizes it, links it, makes sense of it--- creates a memory. A healthy normal memory will be in a logical and sequential order. However, the hormones released during crisis really impact the memory making process. The hormones impair the brain’s ability to immediately develop rational thought. During the traumatic incident, the hormones push the victim into fight/flight or freeze mode, but the hormones also impair the brains ability to create a memory. Immediately after the event, the memory is fragmented and disordered. The survivor will need time (literally 24-48 hours) to process the event and be able to remember in a logical manner.

**What it looks like during an initial investigation:**

The victim tells the story of a horrible thing that just happened. She/he has no emotion. She/he explains it in an “almost matter of fact” kind of way. Further, because of the tonic immobility, she/he is reporting

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4 Ibid.
that she/he “just laid there” and did not fight back or try to run. Some of the story just is not logical- there is no way that happened because the evidence says something else. The story contradicts itself- later at the prosecutor’s interview, pieces are presented in a different sequence and some parts are shifted completely. Consider that. If only 7% of our communication is verbal and 93% is nonverbal,\(^5\) how can we expect people to understand the flat emotions, the lack of animation, the matter of fact delivery, and the fact that she “just laid” there? Especially if they have not yet learned about “freeze” or about hormones. Imagine how difficult it is to reconcile a story if there are pieces that do not match the evidence, or big chunks are missing, or pieces of the story contradict if they have not learned about how memories are made. **This information can change case attrition.**

**However, there is room for evolution in this area:**

1.) As mentioned before, the “Start by Believing” Campaign (http://www.startbybelieving.org/) is a great way to raise awareness, especially when first responding agencies adopt the stance. Consider talking to your local agencies about the idea, take them materials, talk about city-wide proclamations. Let’s get the whole nation to “Start by Believing”!

2.) The End Violence against Women International website (http://www.evawintl.org/onlinetraining.aspx) has FREE online training modules for first responders. Our local Flagstaff detectives have taken many of these modules and the Prescott Police Department is having their officers take these particular trainings. I encourage all advocates to take the free trainings to promote better practices through advocacy.

3.) FETI (Forensic Experiential Trauma Interview) is a promising practice that utilizes information about the parts of the brain that experiences trauma. This technique not only reduces the inaccuracy of the information obtained but enhances understanding of the experience Many law enforcement agencies in northern Arizona are currently training their staff on FETI as a tool for their toolbox. [http://www.bwjp.org/forensic_experiential_trauma_interviews.aspx](http://www.bwjp.org/forensic_experiential_trauma_interviews.aspx)

4.) Join your local CCRT (Coordinated Community Response Team) to domestic violence or sexual assault. Join your local SART (Sexual Assault Response Team). Coordinate with partner agencies, do not compete for resources, streamline practices and protocols, and learn to work together.

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